

REMARKS

This paper is responsive to any paper(s) indicated above, and is responsive in any other manner indicated below.

DRAWING OBJECTIONS/PROPOSED DRAWING CHANGES

With regard to the "Drawings" section on page 2 of the Office Action, submitted herewith under separate cover letter are copies of ones of Applicant's drawing sheets marked with red ink indicating proposed drawing changes to mark FIGS. 2-3 as "Prior Art". As the following is believed to obviate all the listed concerns, reconsideration and withdrawal of the objection to the drawings are respectfully requested. Further, acknowledgment of receipt, and approval, of such proposed drawing changes, are respectfully requested to be provided within the next communication regarding the application.

PENDING CLAIMS

Claims 1-27 were pending, under consideration and subjected to examination in the Office Action. An appropriate claim has been added in order to adjust submit a claim having alternatively worded features/limitations. Such changes are unrelated to any prior art or scope adjustment and are simply refocused claims in which Applicant is present interested. At entry of this paper,

Claims 1-28 will be pending for further consideration and examination in the application.

NON-REWRITTEN ALLOWABLE CLAIMS

Although ones of Applicant's claims have been indicated as being allowable if rewritten, as indicated within the section number "5" beginning on page 5 of the Office Action, rewriting has not yet been effected as it is believed that any base and intervening claims will be allowed responsive to this paper. Applicant respectfully reserves the right to rewrite the potentially allowable claims at a later time if necessary, and Applicant and the undersigned respectfully thank the Examiner for such indication of potentially allowable subject matter.

REJECTION UNDER 35 USC '103

The 35 USC '103 rejection of the claims listed within the section numbered "4" beginning on page 3 of the Office Action as being unpatentable over Applicant's admitted prior art (AAPA) in view of Inamori et al. (U.S. Patent 5,751,278) is are respectfully traversed.

All descriptions of Applicant's disclosed and claimed invention, and all descriptions and rebuttal arguments regarding the applied prior art, as previously submitted by Applicant in any form, are repeated and incorporated hereat by reference. Further, all Office Action statements regarding the prior art rejections

are respectfully traversed. As additional arguments, Applicant respectfully submits the following.

With ever increasing display resolutions (and thus more and more pixels), signal clock frequencies are becoming more of an issue. An object of the present invention is to provide a display device which reduces the signal clock frequency, increases an available time for writing signals, raises an opening rate, and thus permits a high resolution display as well as a high speed motion picture display. In order to accomplish the same, Applicant's disclosed and claimed invention divides a display area up into a plurality of multi-pixel blocks in both the horizontal and vertical directions, and then treats all the pixels within any given block at the same time. That is, a pattern with appropriate spatial frequency is determined for each block unit.

Accordingly, Applicant's disclosed and claimed invention (as claimed, for example, in independent claim 1) claims: A display device comprising a display module which determines a plurality of n (n is an integer equal to or more than 2) pieces of pixels as belonging to one block unit, selects the plurality of pixels in each block unit at the same time and displays a picture image by adding one or a plurality of specific patterns each having different spatial frequencies of each block unit; a display control unit which controls the display module; a picture image signal generation unit which generates picture image signals; and a computing circuit which generates the specific patterns each having different spatial frequencies while weighting the same based on the picture image signals

for every block unit. Other ones of Applicant's rejected claims contain such features/limitations.

Added independent claim 28 somewhat parallels independent claim 1, but contains alternatively-worded features/limitations for consideration. More particularly, such claim 28 claims: A display device comprising a display module to handle a display image as a plurality of blocks in both a first direction and an orthogonal second direction, where each block includes a plurality of n (n is an integer equal to or more than 2) pixels, the display module to select the plurality of n pixels in each block unit at the same time and to display a picture image by adding one or a plurality of specific patterns each having different spatial frequencies to each block unit; a display control unit which controls the display module; a picture image signal generation unit which generates picture image signals; and a computing circuit which generates the specific patterns each having different spatial frequencies while weighting the same based on the picture image signals for every block unit.

Turning now to rebuttal of the applied art, it is respectfully submitted that neither of the applied art handles a display image as a plurality of blocks and neither selects the plurality of pixels in each block unit at the same time. That is, AAPA handles a display image as a plurality of pixels (not multi-pixel blocks) and treats each pixel separately. Likewise, Inamori et al. handles each split display image as a plurality of pixels (not multi-pixel blocks) and treats each pixel separately.

Given the fact that neither applied reference handles a display image as a plurality of blocks, it is respectfully submitted that such references, whether each taken alone or take in combination, still would not have disclosed, suggested, or resulted in Applicant's claimed invention.

As a result of all of the foregoing, it is respectfully submitted that the applied art (taken alone and in the Office Action combinations) would not support a '103 obviousness-type rejection of Applicant's claims. Accordingly, reconsideration and withdrawal of such '103 rejection, and express written allowance of all of the '103 rejected claims, are respectfully requested. Further, at this point, it is respectfully submitted as a reminder that, if new art is now cited against any of Applicant's unamended claims, then it would not be proper to make a next action final.

EXAMINER INVITED TO TELEPHONE

The Examiner is herein invited to telephone the undersigned attorneys at the local Washington, D.C. area telephone number of 703/312-6600 for discussing any Examiner's Amendments or other suggested actions for accelerating prosecution and moving the present application to allowance.

INDICATION OF CHANGES MADE

In order to comply with requirements under the recent changes to U.S. practice, amendments are made via the attached "Appendix - Version With Markings To Show Changes Made".

CONCLUSION

In view of the foregoing amendments and remarks, Applicant respectfully submits that the claims listed above as presently being under consideration in the application are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

To the extent necessary, Applicant petitions for an extension of time under 37 CFR '1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees and excess claim fees, to Deposit Account No. 01-2135 (referencing case No. 503.40146X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



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ATTACHMENTS:

Appendix - Version With Markings To Show Changes Made
marked-up copy of FIGS. 2-3 drawing sheet(s)

CONCURRENT SUBMISSIONS:

Petition for Extension of Time
Form PTO-2038

APPENDIX - VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please amend the claims as follows. Note that the full text and/or status of all claims (including those not being amended within this paper) may also be included to provide the convenience of a complete set of claims for easy review:

Please add the following claim(s):

28. (New) A display device comprising a display module to handle a display image as a plurality of blocks in both a first direction and an orthogonal second direction, where each block includes a plurality of n (n is an integer equal to or more than 2) pixels, the display module to select the plurality of n pixels in each block unit at the same time and to display a picture image by adding one or a plurality of specific patterns each having different spatial frequencies to each block unit; a display control unit which controls the display module; a picture image signal generation unit which generates picture image signals; and a computing circuit which generates the specific patterns each having different spatial frequencies while weighting the same based on the picture image signals for every block unit.